

GEOST Capability Briefing for Amon-Hen

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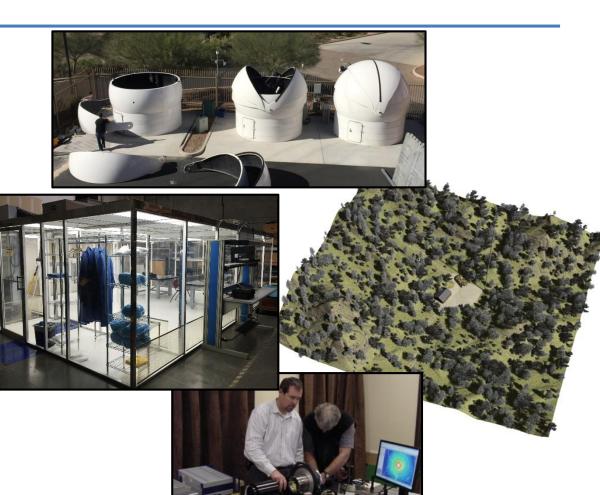
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GEOST, Inc. 3855 W. River Road Tucson, AZ 85741



GEOST Overview

- Architect and develop a wide range of electro-optic (EO) sensor systems, hardware, and software
 - Specialize in Contract R&D
 - Taking TRL 1-3 to TRL 4-6
- High-Fidelity sensor simulation
- Products in Space Situational Awareness, Autonomous Observatories, and Photon Counting Detectors
- Headquarters in Tucson, Arizona
 - "Optics Valley", Optical Sciences
 Center at University of Arizona
 - Office in Washington, DC
- Incorporated in 2004
- Core staff of 35 with multiple consulting engineers and scientists
- Facilities
 - 12,500 sq ft with offices, development laboratories, machine shop, clean room
 - Observatory production line
 - Simulation and analysis software and workstations

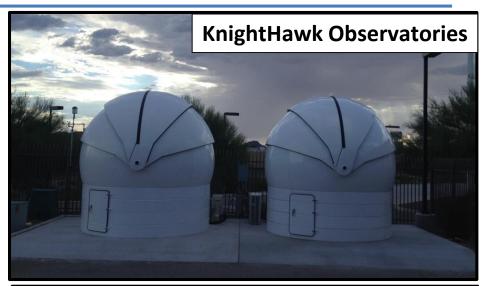


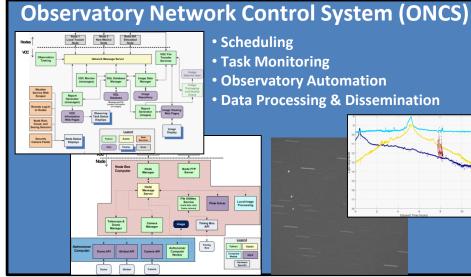


GEOST and SSA

Multiple SSA Programs

- Leverages over \$8M in Government investments
 - SpaceView, LILO, AFRL
 - NightHawk Observatories
 - SSA Simulation
 - Commercial SSA
- Key GEOST Technology is High TRL
 - NightHawk Automated Observatories
 - Observatory Network Control System (ONCS)
 - Software and IT infrastructure to operate a network of observatories
- Key Experience
 - Designing, Fabricating, and Installing systems
 - Operating and maintaining systems
 - Data production and quality control
 - Currently operating GEOST and customer sites around the world







Experienced in

Adaptive Optics/Segmented Optics/Sparse Arrays/Interferometry



W. M. Keck Observatory



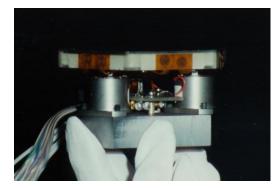




McMath Telescope AO



Phased Array Mirror Extendible Large Aperture (PAMELA)

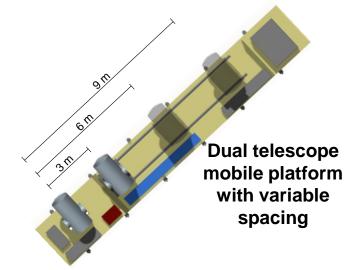


PAMELA Segment with Edge Sensors



GEO Imaging Concepts (Galileo Proposal)

- Dual 1-meter aperture mobile telescope system with variable spacing
 - Provides <9 m baselines which fills lowfrequency UV-plane components
 - Worked in concert with larger central telescope for similar GEO resolution
 - Spatial-Spectral Phase Closure concept creates a "hub" of correlated phase measurements that tie all measurements together
 - Improves UV plane coverage rate by 5x at short baselines and 2x at longer baselines – with minimal loss of UV coverage due to smaller diameter
- Concept also resulted in "mini-Galileo"
 - Stand-alone mobile system with 1 m
 GEO resolution



Dense "Hub" of UV-Plane Coverage

